United Nations E/CN.17/2010/10/Add.5

Economic and Social Council

Distr.: General
5 February 2010
English
Original: Arabic

Commission on Sustainable Development
Eighteenth session
3-14 May 2010
Item 3 of the provisional agenda*
Thematic cluster for the implementation cycle 2010-2011 — review session

Report of the regional implementation meeting for the Economic and Social Commission for Western Asia region**

I. Introduction

1. At its eighteenth session, the Commission on Sustainable Development will review the overall progress that has been made in implementing the commitments, purposes and targets that were agreed in Agenda 21 and the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, through the thematic areas of transport, chemicals, waste management, mining and the 10-year framework of programmes on sustainable consumption and production patterns.

2. The Group of Arab States comprises 22 countries, of which 10 are in Africa and 12 in Western Asia. In 2008, the population of the Arab region was some 340 million, representing 4.9 per cent of the world population. The population of each country ranges from 82 million in Egypt to less than 1 million each in Bahrain, Djibouti and Qatar. Over the past 20 years, average annual population growth in the region has been 2.09 per cent, compared with a global average of 1.5 per cent, with an increase of between 44 and 55 per cent in the number of inhabitants in urban areas. In 2008, the average proportion of the population living in rural areas ranged from 4 per cent in Kuwait to 57 per cent in Yemen. Levels of development also vary in the region; poverty constitutes a serious problem in a number of Arab countries.[1]

3. The present report reviews the progress that has been made at the regional level in implementing the engagements, purposes and targets related to the thematic areas for the 2010-2011 implementation session of the Commission on Sustainable Development. It will be presented to the Commission at its eighteenth session. It

* E/CN.17/2010/1.

** Previously issued under the symbol E/ESCWA/SDPD/2009/WP.2.

[1] See United Nations Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2008 Revision* (2009).

10-24508 (E) 160310 170310

Please recycle

also addresses the challenges and opportunities relating to implementation of the purposes and targets in the Arab region and highlights the priority areas for action in follow-up to implementation of the five thematic topics.

4. The League of Arab States, the Economic and Social Commission for Western Asia (ESCWA) and the United Nations Environment Programme/Regional Office for West Asia worked in coordination to produce the present report. Those bodies prepared a comprehensive regional report on each of the five thematic areas and organized two regional expert group meetings, namely, the second round-table meeting for sustainable consumption and production (27 to 29 September 2009) and the Expert Group Meeting on transport for sustainable development in the Arab region and its relation to climate change issues (29 September to 1 October 2009). The findings of the regional reports were presented to member country experts in the fields of transport, energy, environment and mining, and the contents of the reports and the recommendations of both meetings were discussed during the Arab regional implementation meeting, which constituted one of the meetings of the Joint Committee on Environment and Development in the Arab Region (4 to 6 October 2009). The report includes inputs by countries as well as comments made before and during the above-mentioned regional meetings.

5. The present report consists of five main sections: transport for sustainable development, chemicals, the management of both solid and hazardous waste, mining and the 10-year framework of programmes on sustainable consumption and production patterns.

II. Transport for sustainable development in the Arab region

A. Current status of the transport sector in the Arab region

6. The Arab transport sector[2] not only makes a major contribution to meeting the social and economic development needs of the countries of the region, but also enhances regional and subregional cooperation by facilitating the transport of individuals and goods between countries. However, transport-related activities have various deleterious effects on natural resources, including air and water pollution and related general health problems. The transport sector in the Arab region produces some 22 per cent of the greenhouse gas emissions in the region, of which 85 per cent are road transport emissions. Effective measures are therefore needed to make

[2] See questionnaire on sustainable transport in the Arab countries (2009); see also Statistical Abstract of the ESCWA Region, 27th issue, transport section; International Energy Agency (IEA), Energy Statistics of Non-OECD Countries: 2008 Edition, Organization for Economic Cooperation and Development (2008); Environment 2007: International Conference on Integrated Sustainable Energy Resources in Arid Regions, 28 January-1 February 2007, Abu Dhabi; Department of Economic and Social Affairs, Division for Sustainable Development, "Transport and Sustainable Development in the ESCWA Region", background paper no. 8, ninth session of the Commission on Sustainable Development, 16-27 April (New York, 2001); Economic and Social Commission for Western Asia, Improving Energy Efficiency and the Uses of Cleaner Fossil Fuels in Selected Sectors in Certain ESCWA Member Countries, Part II: The uses of cleaner fossil fuels, E/ESCWA/SDPD/2005/1 (Part II) (2005); report on the responses to the questionnaire on improving road safety: setting regional and national road traffic casualty reduction targets in the ESCWA countries (2009).

the transport sector in the Arab region sustainable while maintaining its effective role in achieving development.

7. Over the past decade, the transport sector in the Arab region has grown considerably: the annual average number of vehicles increased by 4.2 per cent during the period from 1997 to 2008, thus exceeding the 2.8 per cent annual average in developing countries. Some 60 per cent of all vehicles in the Arab countries are passenger vehicles; trucks and buses account for 28 and 3 per cent, respectively. In 2005, land transport in the Arab region, excluding the Comoros, Djibouti, Mauritania and Somalia, consumed some 820 million tons of oil equivalent, which constitutes 51 per cent of primary energy consumption.

8. Traffic management and urban planning practices, as well as low levels of public awareness of road safety procedures, mean that traffic is poorly regulated. Traffic congestion caused by the enormous increase in volume over recent years constitutes a growing problem in the Arab region, particularly in such cities as Baghdad, Beirut, Cairo and Damascus, where the population exceeds 1 million as a result of waves of rural emigration.

9. Fuel subsidies; the lack of an effective and safe public transport fleet; the age of road transport vehicles, which, with the exception of the Gulf States, is on average more than 15 years; and poorly maintained and repaired vehicles all contribute to low levels of energy use efficiency and increased levels of consumption and, consequently, to higher levels of greenhouse gas emissions from vehicles. Given the impact of the foregoing on the feasibility of achieving sustainability in this sector, the necessary legislation and measures to ensure sustainability must be devised.

B. Progress made

10. Arab countries have exerted genuine efforts to achieve sustainability in the transport sector at both the national and regional levels. Legislation has been promulgated, regulations have been amended, plans and strategies have been formulated and infrastructure has been repaired and developed. Nevertheless, the Arab transport sector continues to face numerous problems, and many measures must be adopted if the sector is to be sustainable. The most important progress that has been made in the principal fields that are required in order to achieve the sustainability of the sector is set forth below.

1. Policies and measures necessary in order to improve transport sector management

11. Arab countries have adopted various sets of policies and measures aimed at improving transport sector management, including the following:

(a) The development of public transport, with a view to reducing traffic congestion and reducing journey times. Metro networks have been introduced in Dubai and Egypt, existing railway networks in Egypt have been developed, and plans have been made for the introduction of trains in Jordan and the Syrian Arab Republic. However, further measures to support public transport in the region are urgently needed;

(b) The improvement of urban planning and traffic management. In recent years, several Arab countries, including Egypt, Qatar, Saudi Arabia and the Syrian

Arab Republic, have improved urban infrastructure and road networks, and legislation and laws regulating traffic management have been developed;

(c) Vehicle emissions inspection programmes have been implemented in Egypt, Jordan, Kuwait, Lebanon, Saudi Arabia and the Syrian Arab Republic. Studies estimate that such programmes will decrease fuel consumption by an average of approximately 15 per cent;

(d) The replacement of old cars in order to reduce air pollution and ensure road safety. The authorities in Egypt and Jordan have adopted national plans to replace old taxis operating in large cities. Under those plans, taxi and bus drivers benefit from customs and tax exemptions that enable them to buy new vehicles.

2. Advanced technology in the transport field

12. The countries of the region have begun to use such technology in respect of transport fleets. The principal focus has been on using cleaner fuel, in particular, natural gas. Some countries, including Egypt, have achieved remarkable progress in that area with respect to taxis, and the Syrian Arab Republic and the United Arab Emirates are adopting the same approach. There are as yet few electric cars in the Arab region, albeit Egypt and Qatar are undertaking feasibility studies and implementing pilot projects on hybrid energy buses and electric cars.

3. Improving fuel specifications

13. Efforts exerted by Arab countries in this regard vary. Some have made great efforts to improve the quality of fuel, or use cleaner fossil fuel, and solid measures have been taken to reduce sulphur levels in fuel in Bahrain, Jordan, Kuwait, Lebanon, Palestine and Qatar in particular. Most countries have made efforts to remove lead from fuel and reduce the amount of lead in heating oil. It is encouraging to note that almost all fuel currently consumed in the region is unleaded.

4. Enhancing rural roads and transport networks

14. The Arab countries have formulated plans and implemented projects aimed at enhancing transport links to all areas at the national and regional levels. Such plans include the following:

(a) At the national level, Arab countries, in particular, Egypt, Jordan and Qatar, have allocated budgets to projects aimed at upgrading existing road networks; expanding and maintaining networks serving rural and remote areas; maintaining roads at the national level; and building new bridges and tunnels;

(b) At the regional level, in order to promote regional cooperation, Arab countries plan to build a number of bridges and railways to connect them. Such projects include building a bridge between Qatar and Bahrain that, at 40 kilometres in length, will be one of the longest suspension bridges in the world; to link the Gulf Cooperation Council (GCC) States by a railway network; to extend the rail link between Egypt and the Sudan; a rail network to connect urban centres in Jordan and neighbouring countries; and the Salwa international highway to connect Qatar to Saudi Arabia.

5. Enhancing road safety

15. Many Arab countries have one or more entities concerned with road safety, most of which have national strategic plans to reduce the number of road accidents. The Arab Road Safety Organization was established in order to enhance cooperation and integration between Arab countries in this field. ESCWA is currently developing a regional and national road traffic casualty reduction targets programme.

6. Developing institutional frameworks and standards

16. Many Arab countries have made perceptible progress in issuing standards to regulate transport-related practices. Such initiatives have included prohibiting the use of machines, engines or vehicles that generate emissions that exceed permitted levels.

17. Arab countries adopted the Kuwait Declaration which was issued by the Arab Economic, Social and Development Summit, held on 19 and 20 January 2009. The Declaration stressed that land, sea and air transport networks between Arab countries should be linked and made sustainable, given that they are the main channels for commerce, tourism, investment and employment movements within the Arab region. The Arab Ministerial Declaration on Climate Change, adopted by the Council of Arab Ministers Responsible for the Environment on 6 December 2007, also included provisions relating to the use of clean energy resources, including by the transport sector.

C. Challenges and priority areas for action

18. Transport sector sustainability in the Arab countries continues to face many challenges, of which the most serious include the following:

(a) A paucity of or total lack of integration among plans and policies aimed at achieving the sustainability of the sector, and inadequate institutional and regulatory frameworks;

(b) Inappropriate implementation mechanisms;

(c) Lack of technical expertise and an insufficient number of awareness- and capacity-building programmes, and limited finance and credit mechanisms;

(d) Lack of the data and information necessary for programme planning in the transport sector.

19. In order to develop the role of the transport sector in achieving sustainable social and economic development, Arab countries must, at both the national and regional levels, devise and implement sustainable transport policies and strategies that recognize the particularities of each country and take into consideration the following work areas:

(a) At the national level:

(i) Reviewing, evaluating, implementing and updating current national transport strategies for the enhancement of sustainable transport, while issuing relevant legislation and laws to regulate all transport and, in particular, land transport. All stakeholders should be consulted;

(ii) Giving priority to enhancing and developing public transport and, in particular, railways and metros, and increasing the transport capacity of urban vehicles;

(iii) Improving the efficiency of vehicle maintenance and fuel specifications and implementing emissions inspection and testing programmes;

(iv) Improving traffic flows and enhancing road safety;

(v) Improving urban planning, using land in a manner that will reduce journey times, and making infrastructure environmentally friendly;

(b) At the regional level:

(i) Reviewing current legislation and policies in Arab countries and devising a regional legislative framework based thereon and on the requirements of sustainable transport, utilizing existing ministerial councils and shared Arab experiences in support of recommended strategies;

(ii) Facilitating efforts to mobilize national, regional and international funds to finance high-priority projects in the sustainable transport sector in Arab countries;

(iii) Supporting regional coordination and cooperation for capacity-building in the field of sustainable transport;

(iv) Organizing national and regional awareness-raising campaigns on environmental and road safety for all groups.

III. Chemicals

A. Current status of chemicals management in the Arab region

20. Arab countries made a meaningful contribution to the Strategic Approach to International Chemicals Management (SAICM) development process,[3] which was initiated by the Preparatory Committee for the Development of SAICM in 2003. The approach taken was multisectoral and included many Government representatives and a wide range of stakeholders. During the first session of the International Conference on Chemicals Management, held in Dubai in February 2006, Arab countries contributed to several papers, including the Dubai Declaration on International Chemicals Management, the Overarching Policy Strategy and the Global Plan of Action.

21. Arab countries played an important role in the preparatory process of formulating the SAICM general framework and made a positive contribution by including the issues of capacity-building and illicit international trafficking in the objectives of the Overarching Policy Strategy. The Arab countries also presented the Ministerial Declaration issued by the Council of Arab Ministers Responsible for the Environment at its seventeenth session, in December 2005, which stressed commitment to the implementation of the Overarching Policy Strategy and the Global Plan of Action.

[3] See League of Arab States, General Secretariat, Department of Environment, Housing and Development, Economic Affairs Section, report on progress towards the implementation of the Strategic Approach to International Chemicals Management in the Arab countries (2009).

B. Progress made

22. Arab countries support SAICM as a mechanism to facilitate their efforts and coordinate public policies to promote the achievement of the Johannesburg Plan of Implementation, which set the target date of 2020 for ensuring that all chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment. Arab country delegations that met at the second International Conference on Chemicals Management, held in Geneva in May 2009, adopted a high-level political declaration that is considered an affirmation of the Arab countries' position on implementation of the Strategic Approach.

23. Arab countries made progress in the following areas in implementing the Strategic Approach:

(a) SAICM was included in the agenda of the Arab team responsible for following up international environmental agreements on chemicals and hazardous wastes. Its main outputs are set out below:

(i) The SAICM Arab Coordination Unit was established;

(ii) The Arab SAICM implementation plan was issued;

(iii) SAICM implementation guidelines were issued;

(iv) The standards necessary to identify priorities at the Arab level were issued;

(b) National focal points were designated in many Arab countries, and national committees that include all stakeholders were established;

(c) A number of national cleaner production centres were established and activated in Arab countries. Efforts are under way to establish a regional network for the sharing of expertise and knowledge;

(d) The Regional Programme for Trade and Environment Capacity-Building in the Arab Region was formulated and implemented, as a result of which a number of regional committees for trade and environment were established. A set of Arab guidelines on environmental commodities was also prepared and adopted by the Council of Arab Ministers Responsible for the Environment;

(e) A study was conducted on the extent to which environmental legislation in Arab countries can deliver commitments relating to environmental instruments, and Arab guidelines on developing and updating legislation were prepared;

(f) The regional Arab programme for building capacity in the safe management of hazardous wastes continued, and several training sessions on subjects related to the Strategic Approach were held;

(g) The Regional Centre for Training and Technology Transfer for Arab States, created by the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, has prepared a draft Arab strategy for the prevention of illicit international trafficking in hazardous wastes. Measures are currently being taken for its adoption.

C. Challenges and priority work areas

1. Challenges

24. Implementation of SAICM faces many challenges, including the following:

(a) The lack of an international financial mechanism for SAICM implementation and the insufficiency of national financial and technical resources and accredited laboratories for the handling of chemical safety issues;

(b) Insufficient legislation and inadequate enforcement of such as does exist. There is a disparity among States with regard to the implementation of certain international environmental instruments, which in some cases poses national and regional challenges;

(c) The failure of developed countries to honour commitments to transfer technology, provide safe alternatives and build capacities;

(d) Failure to finalize the establishment of national committees and develop coordination and consistency between existing SAICM-related national institutions and current operations, which in many Arab countries has led to a lack of capacities for the sound management of chemicals at both the national and Arab regional levels;

(e) Difficulties in the implementation of SAICM caused by the multiplicity of parties involved and the many aspects of the Strategic Approach — environmental, economic, social, health and labour-related. It is also difficult to obtain information about many chemicals currently in use, and there is a lack of updated and complete databases on chemicals;

(f) Inadequacy of the mechanisms used to address the social and economic impacts of chemicals on human health, society and the environment, and the lack of the objective scientific standards, methods and information required to evaluate the effects and risks of chemicals at the Arab regional level.

2. Priority areas for action

25. At the national and Arab regional levels, action must be taken with respect to the following:

(a) Applying the principle of risk calculation, analysis and assessment, and formulating standards for calculating the economics of environmental degradation resulting from the hazardous use of chemicals;

(b) Finding the appropriate mechanisms for dealing with the environmental degradation resulting from the unsafe use of chemicals, including evaluating and accrediting specialized laboratories and plants, in addition to activating and updating legislation and laws in order to bring them into line with the relevant international treaties;

(c) Enhancing the partnership principle and ensuring that stakeholders participate more extensively in the implementation of SAICM. Intensive training opportunities on the Globally Harmonized System of Classification and Labelling of Chemicals must be provided;

(d) Preparing an integrated management strategy for chemicals and hazardous wastes;

(e) Providing easily accessed databases and information systems for chemicals currently in use. Such systems should cover the life cycle of chemicals. Experiences should be exchanged in order to promote the transfer of modern technologies and the provision of safe alternatives.

26. At the international level, the international community, including the developed countries, must endeavour to provide international mechanisms and frameworks that will enhance the capacities of developing countries to implement SAICM, including the following:

(a) All matters relating to chemicals management and the measures implemented pursuant to the international conventions should be included as part of SAICM, while maintaining harmony and agreed mechanisms in the management of such issues;

(b) A sustainable international financial mechanism that is flexible and takes into account the status of the implementation capacities of developing countries must be adopted. Comparable opportunities should be provided for various countries to implement the strategic approach;

(c) All countries, in particular the developed countries, should be required to facilitate information flows and provide on easy terms the expertise required to enhance chemicals management. Full support should be extended with respect to the implementation of SAICM and the transfer of modern technologies;

(d) Local, regional and international programmes should be devised for extended workshops that aim to raise stakeholder awareness of the importance of improving chemicals management programmes and the benefits of such management. Similar programmes, disseminated through the media, must also be provided in order to raise community awareness of chemical-related hazards;

(e) The Global Plan of Action must be developed in order to make it more appropriate to the needs and circumstances of developing countries;

(f) Cooperation in the fields of research and technology transfer must be strengthened, and developing countries must be provided with support and financing in the development and establishment of specialized research centres;

(g) Existing mechanisms for dealing with the social and economic effects of chemicals on human health, the community and the environment, including liability, compensation and restitution of rights to their owners, must be provided and improved.

IV. Waste management in the Arab region

27. Numerous issues relate to the sound management of waste in the Arab region[4] and vary from State to State. They constitute a major challenge, not only with respect to the severity of the problem and its economic and environmental impact, but also because of the lack of the up-to-date scientific data and statistics that would make it possible to form an objective evaluation of the problem and propose solutions.

28. Solid and hazardous wastes are generated by several economic and services sectors in the Arab countries: they include agricultural and industrial residues and municipal solid waste. Hazardous wastes include medical and electronic waste.

A. Current status of waste management in the Arab region

29. Sound waste management involves more than safe disposal or recycling: it aims to address the problem by changing unsustainable production and consumption patterns. There are as many approaches to waste management as there are types of waste. Nevertheless, all types of waste are similar in that they are managed by the formal sector and in that there is a need to make use of advanced treatment techniques, and raise the awareness of the public and the relevant institutions and companies of its environmental, health and economic impact.

30. Solid municipal wastes are generated by houses and commercial, educational and health institutions. In 2007, some 83 million tons of waste, most of which was organic in nature, were generated in the Arab region. There are insufficient up-to-date and uniform statistics on the efforts exerted at the national level, and no objective evaluations of or scientific studies on the status of municipal waste.

31. As for agricultural wastes, 500 million tons were generated by the Arab world in 2004, 81 per cent of which were animal waste. Recycling is limited to the production of animal fodder, drying to form traditional fuel or organic fertilizers, and the production of alcohol, compressed wood and paper.

32. In the area of hazardous waste, management varies between Arab countries, which generate no less than 300,000 tons per annum. However, only a few Arab countries have developed strategies for the sound management of hazardous waste and systems to follow up implementation of those strategies.

33. With regard to hazardous medical waste, notwithstanding the implementation of national legislation and commitment to international standards and instruments, the efforts exerted have not reached the required level of integrated and

[4] See League of Arab States, General Secretariat, Department of Environment, Housing and Sustainable Development, "Solid waste alternatives in the Arab countries, the status quo, challenges, start-up methods" (August 2009); see also Basel Convention Centre on Training and Technology in the Arab Countries, "General overview of hazardous waste management in the Arab region" (Cairo University, Egypt); Arab Organization for Agricultural Development, League of Arab States, "Agricultural waste management in the Arab countries" (working paper, regional conference on sustainable transport, League of Arab States headquarters, 28–30 September 2009); United Nations Environment Programme, Regional Office for Western Asia, report on hazardous medical waste management in the Arab countries — between reality and expectation (2009); Hossam Allam, "The Status of E-Waste Management Practices in the Arab Region", Centre for Environment and Development for the Arab Region and Europe (CEDARE), 2009.

comprehensive work that must be undertaken at the national level. The necessary financial and technical resources and essential information are lacking. Some 330,000 tons per annum of such waste cannot simply be incinerated in 445 stations that do not meet environmental standards, but must be managed as part of a more comprehensive strategy for integrated waste management.

34. Electronic wastes (e-wastes) comprise all discarded electrical and household appliances and equipment. Awareness of the risks they pose remains very limited at all levels in the Arab world. Priority in developing management systems for such waste must therefore be given to raising awareness and collecting relevant data. Pilot projects must be implemented, and a regulatory and legal framework that governs the handling of such waste must be formulated.

35. As to industrial waste, industrial and technological developments have led to an increase in the volume of industrial wastes, whether liquid, solid or gas, which constitute a risk to human health and the environment. By 2008, the amount of such waste generated in the region each year had reached 89.6 million tons, the equivalent of some 240,000 tons of solid waste each day. Less than 20 per cent of such waste is treated in conventional or modern ways, while less than 5 per cent is recycled.

36. Statistics estimate that some $5 billion annually are wasted in Arab countries because of lack of interest in investing in the area of waste, in addition to the cost of fighting epidemics, disease and insects consequent upon the accumulation of waste. Arab countries spend some $5.2 billion each year on combating the adverse effects of failure to recycle various types of waste.

37. Statistics indicate that no more than 50 per cent of all waste is collected, and that the cost of collecting and burying such waste exceeds $850 million. Arab investment in the field of waste recycling in general is very limited and does not exceed $200 million. Most such investment represents the endeavours of individuals with limited capacity, whereas there is a need for powerful, integrated industries to recycle waste and make use of the paper, glass, fertilizers, plastic and other materials produced.

B. Progress made

38. Arab countries have made some efforts, albeit insufficient, to deal with the problem of sound waste management. The progress made has included the promulgation of several laws and regulations aimed at regulating waste management and intensive efforts to provide the necessary financing and training for their programmes. Most of the Arab countries have ratified the Basel Convention in an attempt to benefit from international experience in that field and adapt implementation to the particularities of each country. The League of Arab States adopted the Initiative on Sustainable Development in the Arab Region, which focuses on the sound management of waste as a factor in achieving sustainable development. In 2001, the Supreme Council of the Gulf Cooperation Council adopted a unified statute on health-care waste management. While only a few Arab countries have enacted waste-related laws, most have environmental laws that include provisions on waste.

39. In the context of Arab cooperation, the League of Arab States, in cooperation with Arab and United Nations organizations, has exerted efforts to support the activities of Arab countries in this field, including the following:

(a) Promoting the establishment of national cleaner production centres in Arab countries. National centres were established in Egypt, Jordan, Lebanon, Morocco, the Syrian Arab Republic, Tunisia and the United Arab Emirates;

(b) Many training sessions and workshops have considered the status of and proposed solutions to central issues, including the management of recyclable and reusable solid waste; modern trends in the management of waste that causes environmental pollution; the economic and environmental benefits of recycling industrial waste; the treatment of wastewater; recycling plastic waste; and the environmentally safe management of electronic and electrical waste.

C. Challenges and priority areas for action

1. Challenges

40. While a number of countries have prepared strategies, policies and plans and implemented many programmes and projects related to the management of various types of waste, sustainable waste management faces many challenges that have led to delays in implementation. The main challenges are as follows:

(a) Lack of accurate information or statistical data on or reliable inventories of the amount of waste produced by different sources in various sectors in the Arab countries;

(b) Insufficient legislation and inadequate implementation. While some countries have devised organizational frameworks, they lack managerial capacity for implementation and real commitment;

(c) Waste management infrastructure, including for hazardous waste, is fragile, and a number of Arab countries lack sound waste management capacities;

(d) There are no comprehensive national plans for dealing with industrial waste, and many Arab countries have failed to establish national committees. Where countries have established such committees, they largely fail to ensure the participation of all related sectors and stakeholders;

(e) There is a dearth of efficient, specialized human capacities and a lack of awareness in Arab countries as to the importance and role of integrated waste management. Government institutions are slack, and there is a lack of investment by the private sector in this field;

(f) In most areas of the region the industrial sector and, in particular, small enterprises, suffer from the lack of good, modern management systems, which makes the establishment of integrated waste management very expensive;

(g) The developed countries have failed to honour commitments to provide financial resources, transfer technology, provide safe alternatives and build capacities in developing countries. Such assistance could help to reduce waste;

(h) It is difficult to harmonize the implementation procedures of international instruments related to hazardous waste; furthermore, there is a discrepancy between implementation of international environmental treaties and the impact on national and Arab regional implementation.

2. Priority areas for action

41. At the national level, priority areas for action in the next phase may be summarized as follows:

(a) Defining a comprehensive strategy, based on implementation of the integrated waste management concept, for the management of all forms of waste at the national level in Arab countries. That strategy should include reducing, classifying and identifying sources of waste and risks, developing a mechanism for the use of waste, and seeking appropriate and safe alternatives for treatment;

(b) Adopting the methodology of cleaner production and best environmental practices to limit the generation of waste, produce environmentally friendly goods and ensure the safety of the labour force, in addition to improving use of waste;

(c) Establishing monitoring, inspection and follow-up mechanisms in order to provide the chronological data necessary to accurately gauge the competence and efficiency of any activity, and using the data collected in order to update strategies.

42. At the regional and international levels, Arab countries must work on the following:

(a) Establishing an Arab system for data and information that facilitates cooperation, coordination, exchange of expertise, planning, evaluation and the identification of problems and needs;

(b) Adopting a clear international financial mechanism that provides comparable opportunities for various countries in implementing Agenda 21 goals and activities;

(c) Preparing an updatable Arab plan of action that would be consistent with the real needs and capacities of the various countries;

(d) Updating and activating existing legislation in order to bring it into line with the relevant international instruments; providing human capacities and effective implementation mechanisms at all levels; and imposing financial penalties on violators;

(e) Preparing and carrying out comprehensive media campaigns to raise awareness of the benefits of integrated waste management, and encourage national entities to obtain the ISO 14000 environmental management certificate;

(f) Formulating local, regional and international programmes for extended workshops aimed at increasing the awareness of all stakeholders of the importance and benefits of developing industrial waste management programmes. Such programmes should be implemented in cooperation with various civil society organizations;

(g) Supporting and building the necessary institutional capacities and developing human resources in the fields of waste management and the evaluation and choice of technologies; supporting research and studies related to industrial waste management;

(h) Providing, as is essential, safe and accessible alternatives, safer technologies and appropriate facilities for the treatment and safe disposal of hazardous waste;

(i) Preparing financial analysis of all stages of solid waste management economies, including collection, transfer and disposal;

(j) Enhancing the role of the private sector in the field of integrated management of industrial waste by involving it in drawing up public policies, and encouraging it to invest in manufacturing the required tools;

(k) Enhancing international cooperation, encouraging commitment to regional and international instruments that regulate the movement of hazardous waste across international boundaries and taking part in related activities.

V. Progress made in the field of mining

A. Current status of the field of mining in the Arab region

43. Various raw minerals, including, inter alia, raw phosphate, iron, gold and industrial stones, are found in Arab countries. While exploration, extraction and industrial activities have been developed in many Arab countries,[5] they are not comparable to the wealth available and its potential benefits. Exploitation of those materials is an important component of the economies of the region which could bring numerous economic and social benefits.

B. Progress made

44. Arab countries have exerted many efforts to develop their capacities to invest in mineral resources, including the following:

(a) Establishing national centres for remote sensing, and starting to develop geographic databases, which are considered to be an important step towards enabling countries to perform the geological, physical and environmental studies that are necessary to define potential fields of investment and raw mineral reserves; and organizing training sessions for staff on using geographic information systems. The United Arab Emirates has established a club and a library to organize geographic information for that purpose;

(b) Most Arab countries have begun to enact laws and regulations to promote investment which have helped to increase investment in the exploitation of mineral wealth in their territory. However, there is a need to review legislation and laws regulating the exploitation of mineral wealth in a manner consistent with regional and international variables.

45. Against the background of joint Arab programmes of action, and recognizing the importance of achieving Arab integration in the field of mining, Arab countries have achieved the following:

(a) The establishment and activation of the Arab Industrial Development and Mining Organization, which plays a pivotal role in enhancing Arab integration by preparing detailed studies on the needs of Arab industry for the raw minerals that are available in Arab countries, and devising a strategy and implementation

[5] See Arab Industrial Development and Mining Organization, Mineral Resources Administration, report on progress in the field of mining and renewable energy in the Arab countries (June 2009).

mechanism to encourage and motivate local and foreign investment in exploring and exploiting the minerals available in the Arab region. The region is currently preparing a study on mining investment and assessing both the mineral wealth sector and requirements for its development in Arab countries. The Arab region has also digitized a geological and mineral map;

(b) Arab Governments have taken steps to develop their mining industries and achieve integration in the fields of developing extraction works and industrialization activities. They have also strengthened feeding industries related to the mining sector, in an attempt to obtain a fair share of the global raw material and final product market;

(c) With a view to enhancing economic growth, alleviating poverty and achieving sustainable development in the Arab world, the Council of Arab Ministers responsible for mineral wealth affairs is currently working on a plan of action for an Arab partnership strategy. That strategy will develop the mineral wealth sector, attract Arab and foreign investment and establish Arab economic entities capable of taking part in mining investment projects.

C. Challenges and priority work areas

1. Challenges

46. There are a number of challenges to achieving the desired upturn in the mining sector, including the following:

(a) A shortage of databases; those available need to be developed. There is limited Arab cooperation in this field, particularly with respect to the availability of raw materials and the needs of the market;

(b) Customs and taxation obstacles limit the competitiveness of production, and there is a lack of investment incentives in exploration and exploitation operations in areas that appear to be promising in respect of mineral wealth;

(c) There is a need to update and enforce existing legislation and laws.

2. Priority areas for action

47. If Arab capacities in the field of mining are to be developed, the following are required:

(a) Action to complete the formulation of the strategic plan of action of the Arab partnership for the development of the mineral wealth sector;

(b) Infrastructure must be provided and investment encouraged in the region in the field of mining and related industries, and international financial institutions must be invited to support and finance mining projects in Arab countries;

(c) There must be coordination between regional Arab institutions in the fields of remote sensing, geological surveying, mineral exploration, research and consultation, studies of common interest, and research and technical capacities in the mining sector must be shared by the Arab countries;

(d) Geological survey and mineral exploration institutions and bodies in western countries must be invited to cooperate in the field of research and

development with their counterparts in Arab countries. Their laboratories should be used in order to develop Arab human resources;

(e) Consideration should be given to the feasibility of establishing mining organizations and chambers in Arab countries, with a view to their taking part in and coordinating the opening up of exploration and mining to private-sector investment. Investment in small and medium-sized mines located in remote regions of Arab countries should be encouraged;

(f) There should be coordination between training centres and mining schools in the region in order to develop skills and training, create centres of excellence in mining, and provide the scientific and geological information necessary for the development of mineral extraction and processing operations.

VI. Ten-year framework for sustainable consumption and production patterns

A. Current status

48. The Arab countries have exerted significant efforts to include policies related to sustainable consumption and production in the management of various sectors, and have achieved mixed results at both the sectoral and country levels. Efforts were focused on several specific sectors, including energy, water resources, rural development and tourism, in addition to the related issues of waste management, education and lifestyles. However, the results achieved in those sectors remain mixed and limited overall, thereby necessitating greater efforts to be channelled into building on what has already been achieved and seeking to achieve sustainability goals in those and other sectors. Emphasis should be placed on procedures that may achieve more rapid and far-reaching results. Such procedures should be carried out in tandem with national and regional programmes for capacity-building, appropriate technology transfer and adaptation.

49. The energy sector is one of the largest economic sectors in the Arab region and is dominated by the oil and gas sector. The electricity production sector is also very large, and relies on oil and gas for 90 per cent of its production. While sources of renewable energy are available, their contribution to the energy sector remains limited. Although the sector plays a vital role in meeting development needs and makes a huge contribution to Arab economies, consumption and production patterns in the sector continue to need further improvement and to become more efficient: 20 per cent of the population has no access to modern energy services. Thus there continues to be a need for greater efforts to improve the efficiency of production and consumption, particularly in the electricity, industry and domestic sectors, quite apart from the transport sector. Furthermore, it is important to increase the contribution of new and renewable energy resources and cleaner fuel, namely, natural gas, to the production of energy and delivery of modern energy resources to poor regions in urban and rural areas.

50. With respect to water resource management, the scarcity of such resources constitutes one of the main challenges to development in the Arab region. Ten of all the countries that are poorest in water resources are Arab countries, and in eight Arab countries the annual share of water per capita is less than 500 cubic metres.

Some 50 million people in the region do not have access to safe drinking water, and some 80 million people have no reliable sanitation. Furthermore, the growing demand for water caused by the increase in the population and rapid development have exacerbated water problems, particularly in the light of inefficient resource management policies and practices and the absence of safety and security in several countries of the region. Moreover, some 80 per cent of water resources are shared international waters, which could give rise to conflicts.

51. In view of that critical water situation, the countries of the region, with the support of Arab organizations and regional United Nations organizations, have exerted great efforts to promote integrated water resource management, including improved water use efficiency in various sectors and the development of sanitation systems. Arab countries are also working on the development of non-conventional water resources and, in particular, desalination and recycled wastewater and agricultural wastewater, and are encouraging rain-fed agriculture in order to limit agricultural water use. The establishment in June 2009 of the Arab Ministerial Council on Water Resources is a further indication of Arab concern over the issue and of the trend towards regional cooperation in water resource management.

52. As for rural development, the nature of rural areas and the size of their populations vary greatly between Arab countries. While the majority of such areas in many of those countries are given over to agriculture, the Gulf region largely comprises desert. The percentage of the population living in rural areas varies: in 2008 it ranged from 4 per cent in Kuwait to 75 per cent in Yemen. In general, the rural areas of the region are poor as a result of the lack of infrastructure and, in particular, electricity, water, sanitation, and decent housing, which has led to a deficiency of productive activities in those areas, and thus to an acute reduction in income. Rural women, in particular, suffer from the increased burdens they must bear when health and educational possibilities and appropriate employment opportunities are lacking.

53. Agricultural development in the Arab region faces a series of challenges that include the inefficient use of natural resources and, in particular, land and water; unplanned urban expansion, deforestation and the overuse of agricultural chemicals, which leads to soil pollution and degradation.

54. If rural development that will ensure the development of sustainable consumption and production patterns and reduce poverty is to be achieved, it is essential to improve the quality of life of the rural population and achieve food security and the Millennium Development Goal of halving hunger by 2015, in addition to empowering rural women by providing equal opportunities.

55. With regard to tourism and aware of the importance of that sector in supporting national economies and creating additional work opportunities, Arab countries have made great efforts over the past 30 years to develop the tourist sector, which has rapidly developed to become one of the most important sources of national income, particularly in Egypt, Jordan, Lebanon and the United Arab Emirates. The sector has attracted huge investment from both the public and the private sectors, and the number of hotels and tourist nights has increased enormously for all types of tourism, including religious pilgrimage, environmental, cultural, holiday and business tourism. Nevertheless, few Arab countries have adopted standards to ensure the sustainability of the sector, particularly in the light of the link between sector activities and the sustainable consumption of energy,

water and transport and production of waste. While environmental tourism has attracted some interest, its potential, given the many possibilities available in Arab countries in this field, is far from being realized. Therefore, the development of environmental tourism and making tourist activities sustainable are two very important factors in achieving sustainable consumption patterns in this sector.

56. As for waste management, issues related to sound waste management in the Arab region abound and vary between countries, as shown in the fourth section of the present report, which sets forth in detail the priority areas for action at the national and regional levels. This section will review the sound waste management-related activities that are included in the 10-year framework for sustainable consumption and production patterns.

57. With respect to education and sustainable lifestyles, while Arab countries are implementing national programmes to eliminate illiteracy and reform national education systems, illiteracy remains an obvious problem in many Arab countries: one third of all young people in the least developed Arab countries are illiterate. Given that the Arab world has the highest percentage of young people of all the developing regions, addressing young people will have a major impact on future consumption and production patterns as well as on markets and lifestyles. National strategies and programmes for education and the eradication of illiteracy must therefore be formulated and issues relating to sustainable consumption and production and sustainable lifestyles must be incorporated into official curriculums. Regional Arab organizations should assist countries in achieving those goals, and the strategic plan devised by the Arab League Educational, Cultural and Scientific Organization for the development of education in the Arab world, which affirms the link between education and sustainable development, must be updated and activated.

B. Progress made

58. Over the past two decades, Arab countries have made significant progress in many of the areas that are required in order to achieve sustainable consumption and production in the sectors mentioned in this section of the report. The progress that has been made in the fields of water and energy resources was presented in the Arab region implementation reports that have already been presented to the Commission on Sustainable Development at its twelfth and fourteenth sessions. Section IV of the present report addresses in detail the progress that has been made in the area of sound waste management. On that basis, and because the Commission on Sustainable Development at its eighteenth session will focus on the area of sustainable consumption and production, against the background of the 10-year framework for achieving the required result in this area, this section will focus specifically on the policies adopted by Arab countries in all the above-mentioned areas, while section VI.C below will address priority activities proposed for implementation within the 10-year framework of programmes for sustainable consumption and production patterns.[6]

59. In the area of energy, the policies that are pursued focus on the following: (a) providing modern energy services and supplies to the whole population and, in

[6] See the recommendations of the second round table on sustainable consumption and production, held at the League of Arab States headquarters in Cairo from 27 to 29 September 2009.

particular, in rural and remote regions; (b) economic management of energy facilities, including the review of current tariffs; (c) encouraging investment in the fields of drilling for and producing oil and gas and the use of cleaner technology; (d) promoting projects for electricity and natural gas networks at the regional and interregional levels; (e) encouraging the participation of the private sector in the establishment and management of energy facilities; (f) improving energy efficiency while expanding the use of cleaner fuel and renewable energy technology; (g) promoting the use of public transport and railways while supporting the construction of regional and subregional road networks in order to facilitate trade and transport.

60. As to water resources, the policies that are being pursued with a view to achieving the sustainable consumption and production of water resources include the following: (a) adopting integrated water resource management while taking into account the economic and social targets and circumstances of each country; (b) supporting efforts to develop alternative water resources, develop new desalination technologies, collect rainwater, recycle and reuse water and use environmentally safe new technologies; (c) developing and implementing water quality standards, while recycling and reusing treated wastewater; (d) managing water demand while improving agricultural practices and irrigation methods to increase consumption efficiency; (e) ensuring the rights of downstream countries to share common surface water resources; (f) enhancing regional cooperation and integration in respect of water resource management; (g) increasing public awareness of the requirements for the sustainable consumption of water resources, while enhancing the role of civil society and non-governmental organizations in that regard.

61. In the area of rural development and the alleviation of poverty, the following policies must be adopted: (a) infrastructure in rural areas must be improved, particularly water and energy facilities and roads, and should include the use of renewable energy resources; (b) access to education and health services, water and sanitation in rural areas must be improved and gender equality in the development process achieved; (c) the establishment of small and microindustries should be encouraged and microcredit services provided to rural populations; (d) public investment efficiency in agriculture and rural development must be enhanced; (e) sustainable agricultural practices, particularly in respect of water use and the reduction of fertilizer and chemical use, must be encouraged.

62. With regard to education and sustainable lifestyles, if the percentage of educated young people is to be increased and the problem of unsustainable lifestyles addressed, the following are essential: (a) the development of national strategies and programmes for education and the eradication of illiteracy, and the implementation of the internationally agreed goals in the field of education; (b) issues relating to sustainable consumption and production and a sustainable lifestyle must be incorporated into official curriculums; (c) "green" building standards must be enhanced, and ecological relations and fuel efficiency standards must be raised; (d) awareness must be raised through the media and non-governmental organizations of the importance of preserving environmental resources and using products and services efficiently.

C. Ten-year framework for sustainable consumption and production patterns

63. In the light of the policies adopted by Arab countries with a view to prompting action in the area of sustainable consumption and production, which were set forth in section VI.B above, the second round-table meeting on sustainable consumption and production in the Arab region, held at the headquarters of the League of Arab States in Cairo from 27 to 29 September 2009, identified the main sectors on which focus should be placed over the forthcoming 10 years and priority programmes in each of those sectors.

64. In the energy sector, the programmes proposed give priority to:

(a) Improving the efficiency of electricity consumption and production by pursuing policies that aim to achieve the following:

(i) Improve the efficiency of electricity generation stations through the use of high-capacity production units, improve the performance of boilers and introduce systems for recovering waste heat and cogeneration;

(ii) Improve the efficiency of electricity networks by increasing investment in the modernization of networks, and reduce loads on existing networks in order to encourage small-capacity electricity generation by local units;

(iii) Improve the efficiency of electricity in the buildings sector, by adopting environmentally friendly construction methods and using high-efficiency electrical appliances, and by formulating and implementing appropriate legislation;

(iv) Place quality labels on electrical appliances: (a) issue specifications for electrical appliance efficiency and promulgate the necessary legislation for implementation; and (b) pursue the policies necessary to develop and adopt green purchase regulations for electrical appliances;

(b) Developing sustainable transport and giving priority to the development and expansion of public transport by pursuing the policies necessary, constructing new railways and developing existing ones, encouraging the construction of metro lines, increasing the capacity of road transport, and constructing ring roads and regional and subregional roads on which tolls are payable, in order to generate income for their continuous development. In all cases, action must be taken to improve fuel specifications and increase to the extent possible the use of natural gas;

(c) Developing the use of renewable energy resources in the light of the current development of the technology and based on the progress that has been made by the countries of the region in implementing pilot projects, particularly in high-capacity electricity generation, and on the fact that some countries have begun to manufacture equipment locally. Efforts should therefore be channelled towards the following:

(i) Including and developing renewable energy projects in energy sector strategies, building capacities in the planning and implementation of renewable energy projects and manufacturing the requisite tools;

(ii) Extending renewable energy technology use by applying that technology in various sectors and, in particular, in rural areas and by high-capacity electricity generation;

(iii) Establishing small and medium-sized companies for both project implementation and installation and maintenance services, particularly in rural areas, in order to create job opportunities;

(d) Establishing an energy efficiency partnership in the Arab region, involving specialized entities in member countries and the relevant Arab and regional organizations operating in this field, with a view to exchanging information and assisting the Arab countries to formulate the necessary legislation and mechanisms and implement energy-related capacity-building programmes.

65. In the area of water resources management, the proposed programmes called for priority to be given to the following:

(a) Improving water use efficiency by encouraging the use of efficient water use equipment; supporting investment in technologies for efficient water use; and examining the possibilities for the equitable distribution of resources between the various sectors and, in particular, the agriculture and industry sectors;

(b) Managing shared water resources by supporting regional cooperation in implementing international commitments on shared water, and implementing programmes to build capacities to negotiate over shared water issues;

(c) Using sanitation water safely by developing and improving specifications for sanitation water treatment methods and safe use standards, providing incentives for the development of treatment techniques and creating a favourable environment.

66. With regard to sound waste management, the proposed programmes called for the following:

(a) Recycling and reuse by encouraging investment in this field; separation and sorting at source; and developing specifications for ways and means related to the recycling process;

(b) Producing waste-based fertilizers by encouraging the use of animal waste as agricultural fertilizer and supporting the necessary infrastructure for reuse processes.

67. With regard to sustainable tourism, priority programmes include the following: (a) making tourism sustainable by establishing and operating all tourist facilities and developing eco-tourism; (b) developing integrated management for touristic regions, and implementing capacity-building programmes for workers in the sector on ways to make tourist activities sustainable.

68. With regard to education and sustainable lifestyles, priority programmes include the following: (a) building the capacities of young people to achieve sustainable consumption and production in all sectors and integrating those issues into curriculums; (b) training Government procurement experts on green procurement and developing related procedures at the national level; and (c) developing national strategies for education and the eradication of illiteracy that take into account sustainability considerations and provide a decent life for the population.

69. The implementation of all major programmes requires Governments to play a principal role in achieving goals and in developing and implementing programmes and strategies. Other relevant entities must also shoulder their responsibilities in this process, particularly the business and industry sectors, non-governmental organizations, civil society, the media and individuals.

70. In seeking to achieve targets and goals in the above-mentioned priority areas, Arab countries call on the international community and regional and international organizations to support their efforts through capacity-building programmes by providing technical assistance, particularly in the following fields: (a) capacity-building in the field of cleaner production and support for the establishment of relevant national centres; (b) using market-based instruments in developing policies; (c) green procurement and eco-design, eco-packaging, eco-efficiency and eco-labelling; (d) corporate social and environmental responsibility and greater producer responsibility; (e) improving Government institutional capacities, particularly with regard to evaluating environmental risks and developing innovative financing plans, including microfinance; (f) supporting youth exchange programmes for a sustainable lifestyle; and (g) providing Governments with technical support in the field of hazardous waste management.